

Attorney Docket No.: DEX-0146
Inventors: Yang et al.
Serial No.: 09/762,028
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This listing of the claims will replace all prior versions and listings of claims in the application:

Listing of the claims:

Claim 1 (original): A method for diagnosing the presence of lung cancer in a patient comprising:

(a) measuring levels of LSG in cells, tissues or bodily fluids in said patient; and

(b) comparing the measured levels of LSG with levels of LSG in cells, tissues or bodily fluids from a normal human control, wherein an increase in measured levels of LSG in said patient versus normal human control is associated with the presence of lung cancer.

Claim 2 (original): A method of diagnosing metastatic lung cancer in a patient comprising:

(a) identifying a patient having lung cancer that is not known to have metastasized;

(b) measuring LSG levels in a sample of cells, tissues, or bodily fluid from said patient for LSG; and

(c) comparing the measured LSG levels with levels of LSG in cell, tissue, or bodily fluid type of a normal human control, wherein an increase in measured LSG levels in the patient versus

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the normal human control is associated with a cancer which has metastasized.

Claim 3 (original): A method of staging lung cancer in a patient having lung cancer comprising:

- (a) identifying a patient having lung cancer;
- (b) measuring LSG levels in a sample of cells, tissues, or bodily fluid from said patient; and
- (c) comparing measured LSG levels with levels of LSG in cells, tissues, or bodily fluid type of a normal human control sample, wherein an increase in measured LSG levels in said patient versus the normal human control is associated with a cancer which is progressing and a decrease in the measured LSG levels is associated with a cancer which is regressing or in remission.

Claim 4 (original): A method of monitoring lung cancer in a patient for the onset of metastasis comprising:

- (a) identifying a patient having lung cancer that is not known to have metastasized;
- (b) periodically measuring levels of LSG in samples of cells, tissues, or bodily fluid from said patient for LSG; and
- (c) comparing the periodically measured LSG levels with levels of LSG in cells, tissues, or bodily fluid type of a normal human control, wherein an increase in any one of the periodically

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measured LSG levels in the patient versus the normal human control is associated with a cancer which has metastasized.

Claim 5 (original): A method of monitoring changes in a stage of lung cancer in a patient comprising:

- (a) identifying a patient having lung cancer;
- (b) periodically measuring levels of LSG in cells, tissues, or bodily fluid from said patient; and
- (c) comparing the periodically measured LSG levels with levels of LSG in cells, tissues, or bodily fluid type of a normal human control, wherein an increase in any one of the periodically measured LSG levels in the patient versus the normal human control is associated with a cancer which is progressing in stage and a decrease is associated with a cancer which is regressing in stage or in remission.

Claim 6 (original): The method of claim 1, 2, 3, 4 or 5 wherein the LSG comprises SEQ ID NO:4 or 5.

Claim 7 (currently amended): An antibody ~~against an LSG~~ wherein said LSG specific to a protein encoded by a polynucleotide which comprises SEQ ID NO:1, SEQ ID NO:2, SEQ ID NO:3, SEQ ID NO:4 or SEQ ID NO:5.

Claim 8 (original): A method of imaging lung cancer in a patient comprising administering to the patient an antibody of

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claim 7.

Claim 9 (original): The method of claim 8 wherein said antibody is labeled with paramagnetic ions or a radioisotope.

Claim 10 (original): A method of treating lung cancer in a patient comprising administering to the patient an antibody of claim 7.

Claim 11 (original): The method of claim 10 wherein the antibody is conjugated to a cytotoxic agent.